CLAIMS:

1. A base material for tissue regeneration, comprising:

a porous carrier that is formed in a three-dimensional shape; and

a support member that is provided to surround said porous carrier and supports said porous carrier in an externally accessible state.

2. A base material for tissue regeneration in accordance with claim 1, wherein said support member is any of a mesh support member, a palisade support member, and a perforated plate support member.

3. A base material for tissue regeneration in accordance with claim 1, wherein at least one of said porous carrier and said support member is composed of either of a biocompatible material and a bioabsorbable material.

4. A base material for tissue regeneration in accordance with claim 1, wherein said porous carrier is made of one component or a combination of multiple

components selected from the group consisting of collagen, collagen derivatives, hyaluronic acid, hyaluronates, chitosan, chitosan derivatives, polyrotaxane, polyrotaxane derivatives, chitin, chitin derivatives, gelatin, fibronectin, heparin, laminin, and calcium alginate, and said support member is made of one component or a combination of multiple components selected from the group consisting of polylactic acid, polyglycolic acid, polycaprolactone, polylactic acid-polyglycolic acid copolymer, polylactic acid-polycaprolactone copolymer, and polyglycolic acid-polycaprolactone copolymer.

5. A base material for tissue regeneration in accordance with claim 1, wherein said support member has at least one suture thread.

6. A base material for tissue regeneration in accordance with claim 5, wherein the suture thread is composed of either of a biocompatible material and a bioabsorbable material.

7. A base material for tissue regeneration in accordance with claim 1, said base material being formed

in a specific shape available for arthroscopic surgery.

8. An implant material, comprising:

a cell-holding carrier that is formed in a three-dimensional shape and holds a cell thereon; and

a support member that is provided to surround said cell-holding carrier and supports said cell-holding carrier in an externally accessible state.

9. An implant material in accordance with claim 8, wherein said cell-holding carrier is a porous carrier in a three-dimensional shape with the cell held thereon.

10. An implant material in accordance with claim 8, said implant material further comprising:

an artificial graft in a three-dimensional shape that is arranged adjacent to said cell-holding carrier.

11. An implant material in accordance with claim 8, wherein the cell includes at least one of chondrocyte, osteoblast, osteocyte, their precursor cells, mesenchymal stem cell, and embryonic stem cell (ES cell).

12. An implant material in accordance with claim 8, wherein the cell includes chondrocyte held in one half of said cell-holding carrier and either of osteoblast and osteocyte held in the other half of said cell-holding carrier.

13. An implant material in accordance with claim 10, wherein said artificial graft is artificial bone, and the cell is chondrocyte.

14. An implant material in accordance with claim 12, said implant material being applied to treatment of a bone/cartilage defect at a joint.

15. An implant material in accordance with claim 13, said implant material being applied to treatment of a bone/cartilage defect at a joint.

16. An implant material in accordance with claim 8, wherein said support member is any of a mesh support member, a palisade support member, and a perforated plate support member.

17. A base material for tissue regeneration in accordance with claim 8, wherein at least one of said carrier and said support member is composed of either of a biocompatible material and a bioabsorbable material.

18. An implant material in accordance with claim 8, wherein said carrier is made of one component or a combination of multiple components selected from the group consisting of collagen, collagen derivatives, hyaluronic acid, hyaluronates, chitosan, chitosan derivatives, polyrotaxane, polyrotaxane derivatives, chitin, chitin derivatives, gelatin, fibronectin, heparin, laminin, and calcium alginate, and said support member is made of one component or a combination of multiple components selected from the group consisting of polylactic acid, polyglycolic acid, polycaprolactone, and polylactic acid-polyglycolic acid copolymer.

19. An implant material in accordance with claim 8, wherein said support member has at least one suture thread.

20. An implant material in accordance with claim 19, wherein the suture thread is composed of either of a

biocompatible material and a bioabsorbable material.

21. An implant material in accordance with claim 8, said implant material being formed in a specific shape available for arthroscopic surgery.

22. An implant material production method that produces an implant material comprising a cell-holding carrier that is formed in a three-dimensional shape and holds a cell thereon; and a support member that is provided to surround said cell-holding carrier and supports said cell-holding carrier in an externally accessible state,

said implant material production method adopting the process of:

differentiating mesenchymal stem cell into an object cell, preparing a cell suspension of the differentiated cell, and seeding the prepared cell suspension onto a preliminary carrier, which is capable of holding a cell and is formed in a three-dimensional shape, so as to obtain said cell-holding carrier.

23. An implant material production method that produces an implant material comprising a cell-holding

carrier that is formed in a three-dimensional shape and holds a cell thereon; and a support member that is provided to surround said cell-holding carrier and supports said cell-holding carrier in an externally accessible state,

said implant material production method adopting the process of:

seeding a cell suspension containing mesenchymal stem cell onto a preliminary carrier, which is capable of holding a cell and is formed in a three-dimensional shape, and differentiating the mesenchymal stem cell held in said preliminary carrier into an object cell, so as to obtain said cell-holding carrier.

24. An implant material production method in accordance with claim 23, wherein said preliminary carrier is said porous carrier included in a base material for tissue regeneration comprising said porous carrier that is formed in a three-dimensional shape; and a support member that is provided to surround said porous carrier and supports said porous carrier in an externally accessible state.

25. An implant material production method that

produces an implant material comprising a cell-holding carrier that is formed in a three-dimensional shape and holds a cell thereon; and a support member that is provided to surround said cell-holding carrier and supports said cell-holding carrier in an externally accessible state, wherein the cell includes chondrocyte held in one half of said cell-holding carrier and either of osteoblast and osteocyte held in the other half of said cell-holding carrier,

said implant material production method adopting the process of:

seeding a cell suspension containing mesenchymal stem cell into one half of a preliminary carrier, which is capable of holding a cell and is formed in a three-dimensional shape, and culturing and differentiating the mesenchymal stem cell on said preliminary carrier to make chondrocyte held in the one half of said preliminary carrier, and subsequently seeding either of osteoblast and osteocyte differentiated from the mesenchymal stem cell into the other half of said preliminary carrier, so as to obtain said cell-holding carrier.

26.An implant material production method that produces an implant material comprising a cell-holding carrier that is formed in a three-dimensional shape and holds a cell thereon; and a support member that is provided to surround said cell-holding carrier and supports said cell-holding carrier in an externally accessible state, wherein the cell includes chondrocyte held in one half of said cell-holding carrier and either of osteoblast and osteocyte held in the other half of said cell-holding carrier,

said implant material production method adopting the process of:

seeding a cell suspension containing mesenchymal stem cell into one half of a preliminary carrier, which is capable of holding a cell and is formed in a three-dimensional shape, and culturing and differentiating the mesenchymal stem cell on said preliminary carrier to make chondrocyte held in the one half of said preliminary carrier, and subsequently seeding a cell suspension containing mesenchymal stem cell into the other half of said preliminary carrier and culturing and differentiating the mesenchymal stem cell on said preliminary carrier into either of osteoblast and

osteocyte, so as to obtain said cell-holding carrier.

27. An implant material production method in accordance with claim 26, wherein said preliminary carrier is said porous carrier included in a base material for tissue regeneration comprising said porous carrier that is formed in a three-dimensional shape; and a support member that is provided to surround said porous carrier and supports said porous carrier in an externally accessible state.

28. An implant material production method that produces an implant material comprising a cell-holding carrier that is formed in a three-dimensional shape and holds chondrocyte thereon; a support member that is provided to surround said cell-holding carrier and supports said cell-holding carrier in an externally accessible state; and an artificial bone in a three-dimensional shape that is arranged adjacent to said cell-holding carrier,

said implant material production method making the artificial bone constructed of an artificial bone material and subsequently preparing said cell-holding carrier with

the chondrocyte held thereon to be arranged adjacent to the artificial bone and surrounded by said support member.